BASHKIN, N.Ya.; KOVALEVA, L.S.; SUKHOTIN, B.N.; TUNKOV, V.P.; CHURAKOV, A.I.

Results of using open-hearth briquets instead of lump ore.
Stal' 24 no.10:889-890 O '64. (MIRA 17:12)

CHURAKOV, A.I.

Dust control in the Gubkin mine. Gor.zhur.no.11:58-61 N '56.
(MLRA 10:1)

1. Nachal'nik rudnika imeni Gubkina.
(Mine dusts)

CHURAKOV, A.I.; MIKHAILYAK, Yu.P.; YEFIMOV, V.P.

Production of high-quality concentrates at the IUzhno-Korobkovskaia ore Dressing Plant of the "KMAruda" Combine. Gor. zhur. no.11:50-52 N '63. (MIRA 17:6)

1. Gosudarstvennyy gornorudnyy kombinat Kurskoy magnitnoy anomalii.

AUTHOR: Churakov, A.I., Engineer

98-58-4-10/18

TITLE: On Coefficient Values of Water Counterpressure (K voprosu o velichine koeffitsienta protivodavleniya vody)

PERIODICAL: Gidrotekhnicheskoye Stroitel'stva, 1958, Nr 4, pp 42-44 (USSR)

ABSTRACT: The bottom of a concrete hydrotechnical construction is exposed to the action of suspension pressure and filtration pressure. In the case of a sand foundation, these pressures extend over the entire base of the construction. Some authors claim that in the case of argillaceous ground, the water pressure is exerted only over that part of the base, not in direct contact with the ground. A series of tests have been conducted to determine the value of the coefficient of the counterpressure under varying pressure at the contact between structures and ground (either sand or clay). The equipment for investigating the conditions of buoyancy is shown in Figure 1, consisting of a tank and a piston. Experiments were conducted under varying pressures in the foundation resulting ultimately - when the pressure reached 0 - in the piston beginning to float (buoyancy test). The test was conducted in such a way that the piston was placed on the foundation in the tank, into which water was poured until a pres-

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sure was attained, which forced the piston up. On a sand foundation the piston floated up as soon as the calculated water level in the reservoir was attained. In the case of a clay foundation some time elapsed until the piston rose. Results of the tests are given in Table 1. It appears that in the case of a sufficiently wide base, stabilization and establishment of full counterpressure can take many years. Experiments with ground under constant pressure were executed with special equipment as shown in Figure 2, consisting of a cylinder, a stationary piston, a mobile piston, a load exerting device and a measuring apparatus. After applying a certain pressure at the contact between the piston and the ground (which pressure was maintained during the entire experiment), water was admitted into the foundation up to a given pressure. Comparing the water pressure applied below the mobile piston, with the force required to balance this pressure from above, it was possible to determine the coefficient of counterpressure. For argillaceous ground, the coefficient during the experiments was 0.67 - 0.81 and for sand 0.94 - 0.95. The coefficient of counterpressure (at constant or variable pressure) at the contact between ground and base, increases at the rate of stabilization

of the filtration pressure. In the case of clay, the time required for filtration of water under a dam to stabilize, may be years, whereas with sand the stabilization takes place within hours. Experiments with the floating piston proved that with the absence of pressure at the contact between piston and foundation and after filtration has become stabilized, the coefficient of counterpressure equals 1. In the event of pressure existing at the contact between piston and foundation, when filtration pressure on the piston has reached its maximum and become stable, the coefficient of counterpressure is less than 1; being 0.67 - 0.81 for argillaceous ground, and 0.95 - 1 for sand. The value of this coefficient decreases with increasing pressure at the contact.

There are 2 figures, 1 table, and 9 references of which 8 are Soviet and 1 English.

ASSOCIATION: Moskovskiy inzhenerno-stroitel'nyy institut imeni V.V. Kuybysheva (Moscow Engineering and Construction Institute imeni V.V. Kuybyshev)

AVAILABLE: Library of Congress
Card 3/3 1. Dams-Water pressure analysis 2. Water pressure-Analysis

CHURAKOV, A.I., inzh.

Experimental studies on unstable percolation in loam soils. Nauch. dokl.vys.shkoly; stroi. no.3:242-249 '58. (MIRA 12:7)

1. Rekomendovana kafedroy gidrotekhnicheskikh sooruzheniy Moskovskogo inzhenerno-stroitel'nogo instituta imeni V.V. Kuybysheva.
(Soil percolation)

CHURAKOV, A. I.: Master Tech Sci (diss) -- "Some problems of filtration in clayey soils". Moscow, 1959. 15 pp (Min Higher Educ USSR, Moscow Order of Labor Red Banner Construction Engineering Inst im V. V. Kuybyshev), 130 copies (KL, No 13, 1959, 108)

CHURAKOV, A.I., aspirant

Magnitude of the coefficient of uplift pressure. Sbor.trud. MISI no.29:213-218 '59. (MIRA 12:7)

(Dams)

CHURAKOV, A.I.

Upraise mining by means of sectional blasting of deep holes in mines of the Kursk Magnetic Anomaly. Gor. zhur. no.12:30-33 D '61. (MIRA 15:2)

1. Glavnyy inzh. kombinata KMAruda, Kurskaya magnitnaya anomaliya.

(Kursk magnetic anomaly--Mining engineering)
(Blasting)

GRISHIN, M.M., prof., doktor tekhn.nauk; POSPELOV, V.N., kand.tekhn.nauk, dotsent; CHUPRIKOV, I.K., kand.tekhn.nauk; CHURAKOV, A.I., kand.tekhn. nauk

Study of the rock foundation of the Charvak Dam. Sbor.trud.MISI no.32:5-14 '61. (MIRA 14:7)

(Charvak—Dams)

CHURAKOV, A.I., kand.tekhn.nauk

Artificial lowering of the water level in soil with low permeability.
Sbor.trud.MISI no.32:112-115 '61. (MIRA 14:7)
(Soil percolation) (Drainage)

BASHKIN, N.Ya.; DMITRIYEVSKIY, V.S.; KISLOV, V.M.; CHURAKOV, A.I.

Using fluxed briquets in smelting steel in heavy duty open-hearth furnaces. Stal' 24 no.12:1081-1083 D '64.

(MIRA 18:2)

DEMIN, G.I.; PLUZHNIKOV, A.I.; CHURAKOV, A.M., inzh.; ZHILIN, I.S., inzh.; MAKAROV, D.M., inzh.; LEBEDEV, N.D., inzh.; SHISHLOV, D.D., inzh.; IGLIN, V.P., inzh.; YEVLAYEV, E.S., laborant; KISELEV, V.V., laborant; KOTEL'NIKOV, V.V., laborant; TYULENEVA, N.I., laborant

Transfer of a holding furnace to heating by natural gas with self-carburation. Stal' 23 no.8:755-758 Ag '63. (MIRA 16:9)

1. Moskovskiy institut stali i splavov (for Demin, Pluzhnikov).
(Furnaces, Heating)

CHURAKOV, A. M.

USSR/General and Special Zoology. Insects. Injurious Insects.and Ticks. Pests of Cereal Crops P

Abs Jour : Ref Zhur - Biol., No 11, 1958, No 49604

Author : Churakov A.M., Tagirova E.F.
Inst : -
Title : Aerosols in the Control of the Corn Borer

Orig Pub : Zashchita rast. ot vredit. i bolezney, 1957, No 2, 35

Abstract : The following were the indices of the aerosol treatment: the mist-forming power of AG-L6 was 3.6 litres per 1 minute, the rapidity of the machine's movement - not more than 4 km. per hour, the working range - 170-200m., the outlay of 8% oily DDT solution - 6-8 l/ha., the work - to be conducted at night (the maximum flight of the moths was from 10 p.m. to 2 a.m.). The first treatment was carried out at the emergence of 5-7% of the moths of the first generation and

Card : 1/2

USSR/General and Special Zoology. Insects. Injurious Insects and Ticks. Pests of Cereal Crops P

Abs Jour : Ref Zhur - Biol., No 11, 1958, No 49604

the second treatment at the beginning of the flowering of plumes; the first treatment against the second generation was at the emergence of 60% of the moths (10-20 egg-deposits per 100 plants when 30-50% were infected with Trichogramma -T), the second treatment was after 5 days (26-36 egg-deposits per 100 plants when 50-70% were infected with T). In the first 3 days after each treatment, the number of egg-deposits of the second generation moths sharply decreased; after that, they increased with an increase in the degree of infection. Therefore, the use of aerosols in the specified indices is successful only against moths of the first generation and is not expedient against the second generation where the Trichogramma is active. -- A.P. Adrianov

Card : 2/2

USSR/General and Special Zoology - Insects.

Abs Jour : Ref Zhur - Biol., No 5, 1958, 21101

Author : Churakov, A.M.

Inst :

Title : Aerosol Control of a Group of Pests on Fruit Plantings.

Orig Pub : Sad i ogorod, 1957, No 2, 60-63

Abstract : AG-L6 was used on 120 hectares of fruit-bearing plants, 50 hectares of the nursery, and 20 km of protective strips at the time of the opening of the buds and the coming of age of the apple worm in the first and second hatchings. Three variations of the treatment were given: the preparation was sprayed through four, three and two rows of trees (40, 30 and 20 m). The first and the third variations of the treatment were carried out with aerosols of an 8% solution of technical DDT in diesel fuel (DF); the second variation was with an aerosol solution consisting of 8% DDT, 25% distilled extract of phenolized oils,

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and 67% of DF. After the first treatment (19-20 May) 87.3%, 93.5% and 97.4% of the aphid larvae in all three variations, 75-100% of the larvae of the apple sucker, and 77.7-100% of the larvae of the apple moth died. After the second treatment 47.1-95.8% of the aphid larvae, 68.1-78.5% of the red fruit-tick larvae in the first variation, and 97.1-98.2% in the second variation died. The treatment of June 9 in the third variation was most effective against the apple worm. There was very little damage to fruits by the larvae of the second hatching (a result of the third treatment). May beettles, gypsy moth larvae and spanish flies died in the treatment of the protective strips.

USSR / General and Specialized Zoology. Insects. P
Forest Pests.

Abs Jour Ref Zhur - Biol., No 17, 1958, No 78376

Author : Churakov, A. M.
Inst : Moskovskaya stantisiya Vsesoyuznogo nauchno-issledovatel'skogo instituta zashchity rasteniy.
Title : The Acorn Weevil

Orig Pub : Zool. zh. 1957, 36, No 5, 700-714

Abstract : Curculio glandium in the "Red Forest" of the Krasnodar Region is the basic pest of acorns. It has a two-year generation. It winters in the first year as a larva, the second time as a beetle not yet ripe sexually; hatches in August-September The beetles come out of the soil in May and go on the trees. Developing of the gonads and egg-tubes continues for 2½ months. Sexual maturity comes in a period of additional feeding on devel-

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USSR / General and Specialized Zoology. Insects. P
Forest Pests.

Abs Jour : Ref Zhur - Biol., No 17, 1958, No 78376

oping acorns, when (in the 2d half of July) the weevil does its worst damage. The larvae in the acorns accumulate many nutritious materials which provokes the intensity of egg laying by the weevils. The coming-out of the larvae from the acorns - from the end of August - is independent of the time of the falling of the latter from the trees. DDT and hexachlorocydohexane are not toxic for the larvae which come out of the acorns, and treating the soil below the limb of the trees with them is useless, but a one-time treatment with an aerosol 10% solution of DDT of the fruit-bearing oak-groves in the period of the additional feeding of the weevils and the beginning of the egg-laying, using 15 l/ha, completely insures the conservation of the acorn crop. -- A. P. Adrianov.

Card 2/2

CHURAKOV, A.M., nauchnyy sotrudnik; PIGAROVA, Ye.N., nauchnyy sotrudnik

Aerosol treatment of blossoming orchards. Zashch.rast.ot vred. i bol. 3 no.2:57 Mr-Ap '58. (MIRA 11:4)

1. Mosstazr.
(Fruit--Diseases and pests) (Aerosols)

P-5

Country : USSR
CATEGORY :

ABS. JOUR. : RZBiol., No. 19, 1958, No. 87708

AUTHOR : Churakov, A. M.; Pigarova, Ye. N.
INST. :
TITLE : The Control of Gypsy Moth

ORIG. PUB. : Sad i ogorod, 1958, No 3, 59-60

ABSTRACT : No abstract.

USSR/General and Specialized Zoology - Insects. Harmful Insects and Acarids. Chemical Means in the Control of Harmful Insects and Acarids. P

Abs Jour : Ref Zhur Biol., No 6, 1959, 25419

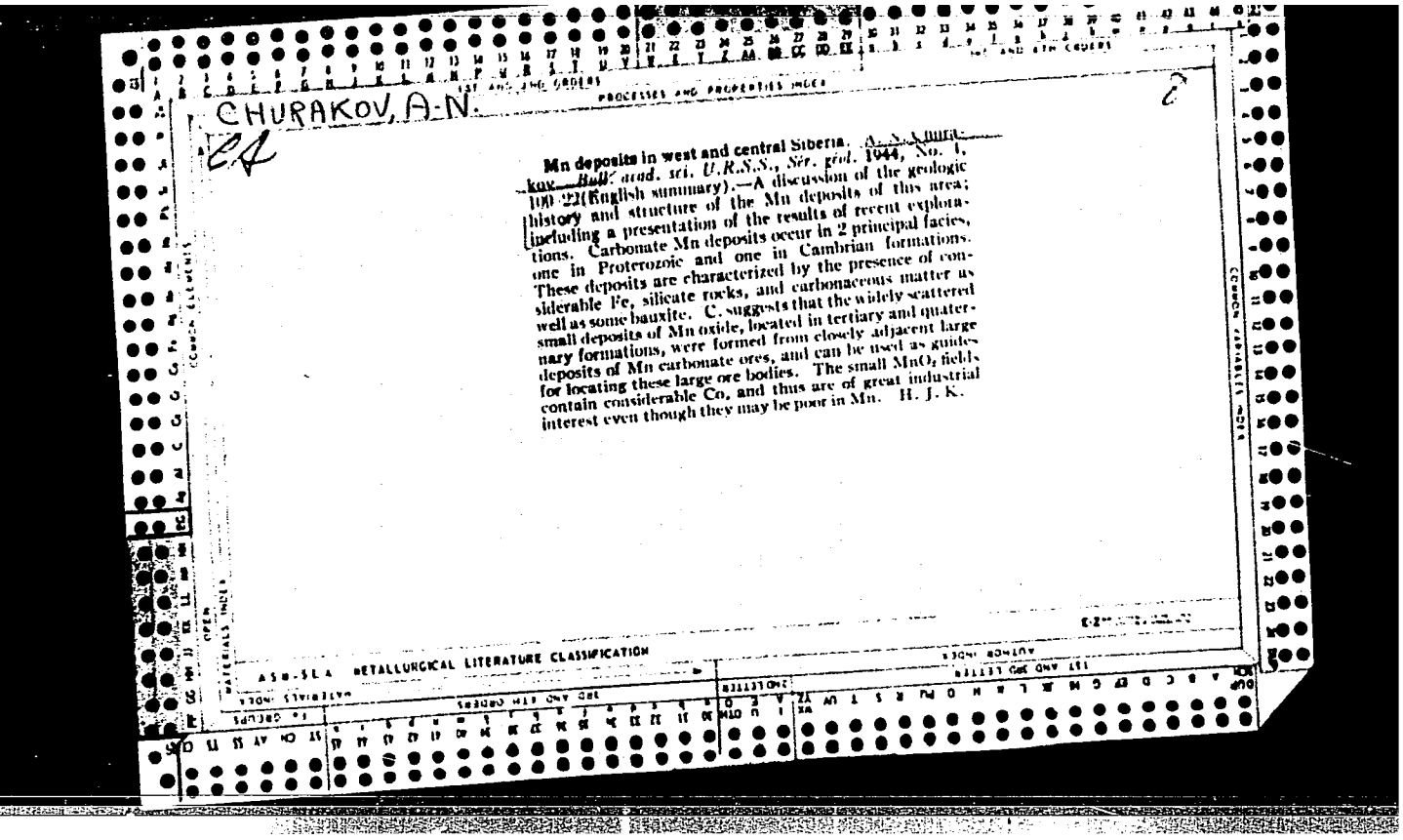
Author : Churakov, A.M., Pigarova, Ye.N.
Inst :
Title : An Aerosol Method in the Control of Pests

Orig Pub : Sad i ogorod, 1958, No 4, 59-60

Abstract : No abstract.

Card 1/1

CHURAKOV, A. M.: Master Biol Sci (diss) -- "The biology of the acorn curculio (Curculio glandium Marsh)". Leningrad, 1959. 15 pp (All-Union Order of Lenin Acad Agric Sci im V. I. Lenin, All-Union Sci Res Inst of Plant Protection), 150 copies (KL, No 7, 1959, 123)



CHURAKOV, A-N.

Mn deposits in west and central Siberia. A. N. Churakov. *Bull. acad. sci. U.R.S.S., Sér. géol.* 1944, No. 1, 109-22 (English summary).—A discussion of the geologic history and structure of the Mn deposits of this area; including a presentation of the results of recent explorations. Carbonate Mn deposits occur in 2 principal facies, one in Proterozoic and one in Cambrian formations. These deposits are characterized by the presence of considerable Fe, silicate rocks, and carbonaceous matter as well as some bauxite. C. suggests that the widely scattered small deposits of Mn oxide, located in tertiary and quaternary formations, were formed from closely adjacent large deposits of Mn carbonate ores, and can be used as guides for locating these large ore bodies. The small MnO_2 fields contain considerable Co, and thus are of great industrial interest even though they may be poor in Mn. H. J. K.

CHURAKOV, A.N.

Geological and geographical research of V.A.Obruchev in Siberia and Central Asia. Och.po ist.geol.znan. no.2:20-39 '53. (MLRA 7:5)
(Obruchev, Vladimir Afanas'evich, 1863-1953)

CHURAKOV, A.P.

Onestage method of production of norsulfazole and streptocide at the Sverdlov Chemico-Pharmaceutical Plant. Med. promyshl. SSSR no.5:23-26 Sept-Oct 1952. (CLML 23:4)

CHURAKOV, B. N.

3(5,7) PHASE I BOOK EXPLOITATION SOV/2822

Mezhduvedomstvennoye soveshchaniye po merzlotovedeniyu. 7th, Moscow, 1956

Materialy po inzhenernomu merzlotovedeniyu (Materials on Engineering Aspects of Permafrost; the 7th Interdepartmental Conference on Studies of Permafrost) Moscow, Izd-vo AN SSSR, 1959. 199 p. Errata slip inserted. 1,300 copies printed.

Sponsoring Agency: Akademiya nauk SSSR. Otdeleniye geologo-geograficheskikh nauk. Institut merzlotovedeniya.

Eds.: I. Ya. Baranov, N. A. Tsytovich, and A. M. Chekotillo; Ed. of Publishing House: A. L. Bankvitser; Tech. Ed.: Ye. V. Makuni.

PURPOSE: This book is intended primarily for construction engineers and geologists interested in permafrost problems.

COVERAGE: This collection of articles contains reports originally discussed at the 7th Interdepartmental Conference on Permafrost held in Moscow in March, 1956. Materials of this conference were published in three issues: general permafrost studies, engineering aspects of permafrost (present work), and ground physics and mechanics. Individual articles of this work discuss basic problems of planning, building, and operating various buildings and structures in permafrost regions. Some of the information reported, particularly on hydraulic engineering construction, is new and appears for the first time in the literature on permafrost. Articles are accompanied by references.

Materials on Engineering Aspects (Cont.) SOV/2822

Card 4/6

PESKOV, Timofey Andreyevich; SOVAYLENKO, Vasiliy Kliment'yevich; CHURAKOV, Denis Andreyevich; KALININ, Aleksandr Vasil'yevich; SVECHNIKOV, A.A., red.; KORNEYEVA, V.I., tekhn. red.

[Problems in arithmetic; a textbook for teachers of grades 5-6 in eight year schools] Sbornik zadach po arifmetike; posobie dlia uchitelei V-VI klassov vos'miletnei shkoly. Izd.2. Moskva, Uchpedgiz, 1963. 214 p. (MIRA 17:2)

CHURAKOV, Konstantin Ivanovich; ASTRAT'YANTS, N., red.

[Construction projects of the seven-year plan] Stroiki semiletki. Makhachkala, Dagestanskoe knizhnoe izd-vo, 1964. 62 p. (MIRA 18:5)

CHURAKOV, I.I.

Powdery mildew of sunflower. Zashch. rast. ot vred. i bol. 8 no.2:44 F '63. (MIRA 16:7)

1. Agronom po zashchite rasteniy Leovskogo proizvodstvennogo kolkhozno-sovkhoznogo upravleniya, g. Leovo, Moldavskoy SSR.
(Moldavia--Sunflowers--Diseases and pests) (Moldavia--Mildew)

CHURAKOV, L.L.

Our experience of rapid crosscutting. Biul. TSIIN tsvet. met. no. 5:12-13 '58. (MIRA 11:7)
(Mining engineering)

CHURAKOV, L.A., mekhanik

Device for protecting manometers from flowing-in mortars. Suggested by L.A.Churakov. Rats.i izobr.v stroi. no.9: 60-61 '59. (MIRA 13:1)

1. Po materialam tresta Mosotdelstroy No.3 Glavmosstroya, Moskva, Trekhprudnyy per., 4,d.
(Manometer)

CHURAKOV, L.Ya.

SHAL'KIN, N.D., kand.tekhn.nauk; YERMOLENKO, S.D., kand.tekhn.nauk;
CHURAKOV, L.Ya., insh.

Fixing rudder end plates to improve the ease of vessel handling.
Rech. transp. 17 no.4:31-32 Ap '57. (MIRA 11:4)
(Steering gear) (Ship handling)

BORSHCHEVSKIY, Yu.T.; CHURAKOV, L.Ya.

Movement of a two-phase turbulent flow between parallel plates.
Trudy NIIVTa no.16:3-11 '64. (MIRA 18:4)

CHURAKOV, L.Ya.

Calculating the resistance of water to the movement of dredges. Trud. NIIVTa no.16:69-71 '64. (MIRA 18:4)

L 42918-66 EWT(l)/EWP(m) WW/JXT(CZ)

ACC NR: AT6005051 (N) SOURCE CODE: UR/3191/64/000/016/0003/0011

AUTHOR: Borshchevskiy, Yu. T.; Churakov, L. Ya.

ORG: None *

TITLE: Motion of a two-phase turbulent flow between parallel plates

SOURCE: * Novosibirsk. Institut inzhenerov vodnogo transporta. Trudy, no. 16, 1964. Voprosy gidrotekhniki (Problems of hydraulic engineering), 3-11

TOPIC TAGS: fluid flow, dimension analysis, flow analysis, fluid friction, flow velocity, TURBULENT FLOW

ABSTRACT: General differential equations of motion for flow of a fluid saturated with a solid granular phase are used as the basis for an approximate solution of the problem of two-phase turbulent flow between parallel plates. Analytical expressions are derived for stress, velocity and friction assuming fixed plates and also for the case where one plate is movable. Experiments conducted in a 150×150mm wind tunnel with an average air stream velocity of 5.65 m/sec along the axis showed that the dimensionless velocity profile may be expressed by the equation $V=1-0.15\eta^2-0.85\eta^{20}$ which may be used for determining the experimental coefficients in the analytical formulas. Corresponding expressions are given for the dimensionless tengential stress in a single-phase flow and for the dimensionless velocity profile and tengential stress in a two-phase

Card 1/2 UDC: 532.507

L 42918-66
ACC NR: AT6005051

flow consisting of an air-sand mixture. Approximation curves calculated from these formulas show completely satisfactory agreement with experimental data. The equations derived in this paper may be used for solving the problem of friction drag on a vessel in shallow water where the interaction between hull and stream results in suspension of sand particles. Orig. art. has: 4 figures, 40 formulas.

SUB CODE: 20/ SUBM DATE: None/ ORIG REF: 002/ OTH REF: 002

Card 2/2 MLP

CHURAKOV, M.M.; RUDAKOV, I.P.; KHLEBNIKOV, A.Ye.

Hydrogen behavior during the smelting of steel for shaped casting. Izv. vys. ucheb. zav.; chern. met. 6 no.11:47-53 '63.
(MIRA 17:3)

SOV/137-58-9-18582

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 9, p 58 (USSR)

AUTHORS: Churakov, M.M., Khlebnikov, A.Ye.

TITLE: On the Problem of Improving the Scrap-smelting Technology of High-grade Steel in Basic Open-hearth Furnaces (K voprosu uluchsheniya tekhnologii vyplavki kachestvennoy stali skrap-protsessom v osnovnykh martenovskikh pechakh)

PERIODICAL: V sb.: Staleplavil'n. proiz-vo. Moscow, Metallurgizdat, 1958, pp 27-43

ABSTRACT: Ten separate smeltings were carried out in order to evaluate the expediency of smelting structural Cr-Ni steel in 30-ton, fuel-oil-operated, open-hearth furnaces employing no O_2 and operating in accordance with a novel technique which provides for an intensified boil period of the molten metal with a low Mn content during that period (no Fe-Mn is added) and involves the utilization of Si-Mn for purposes of preliminary deoxidation. The new procedure reduced the duration of the smelting operation by approximately 12%, the average time being 7 hours and 36 minutes. 34% of Mn contained in the Si-Mn was oxidized and 66% of this element was utilized (as contrasted

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On the Problem of Improving the Scrap-smelting Technology (cont.)

with 58.9% in the case of standard technology). As the Mn content decreases in the course of a boil, the content of S remains unchanged and constitutes 0.013-0.015%. Only Si-Mn (in amounts of 7-8 kg/t) is employed for deoxidation of steel, thus making it possible to reduce the weight quantity of the reductant by one third, to correspondingly lower the amounts of gases and nonmetallic inclusions being introduced into the molten metal, and to reduce the content of P which, in a finished steel, amounts to 0.0136%. In addition, deoxidation may be carried to completion if the steel contains 0.25-0.27% of C instead of 0.19-0.21%. The novel technique reduces the consumption of Mn and Si by 6 and 24%, respectively, but increases the consumption of Cr by 8%. Compared with metal obtained in standard smelting procedures, the steel produced by the novel technology is characterized by increased plasticity and a greater a_k.

L.K.

1. Chromium-nickel alloys--Test methods 2. Open hearth furnaces--Performance
3. Manganese--Oxidation 4. Manganese--Consumption 5. Silicon--Consumption

ACCESSION NR: AP4040771 S/0021/64/000/006/0763/0766

AUTHOR: Yeremenko, V. N.; Shtepa, T. D.; Churakov, M. M.

TITLE: Interaction of titanium with iridium

SOURCE: AN UkrRSR. Dopovidi, no. 6, 1964, 763-766

TOPIC TAGS: titanium-iridium system, titanium iridium alloy, alloy property, alloy structure, titanium indium compound

ABSTRACT: Methods of metallography, x-ray diffraction, and microhardness tests were used to investigate titanium-iridium alloys containing 1—55 at% iridium. Alloys were melted in an unconsumable electrode arc furnace in an argon atmosphere, then annealed at 1100C for 48 hr in evacuated quartz ampoules and furnace cooled. Three intermediate phases were found in the system. The phase appearing in the alloy with 15 at% iridium was designated the γ-phase; the alloy with 25 at% iridium consists of γ-phase only. According to the composition and structure, it is the Ti_3Ir compound; its microhardness is 780--850 kg/mm^2. Alloys with high γ-phase content are

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ACCESSION NR: AP4040771

brittle and break down during machining or sharp temperature changes. In the alloy with 33 at% iridium another phase, the δ'-phase, is formed. The alloy with 40% iridium consists of the δ'-phase alone, the microhardness of which is nearly 700 kg/mm^2. This phase is based apparently on the TiIr compound and is a high temperature modification of the δ-phase. The γ-phase has a Cr_3O-type cubic structure with a lattice constant of 5.00 kX; the δ'-phase has a CsCe-type structure with a lattice constant of 3.10 kX; the structure of the δ-phase could not be determined. Orig. art. has: 3 figures.

ASSOCIATION: Insty*tut metalokeramiki ta spetssplaviv AN URSR (Institute of Powder Metallurgy and Special Alloys, AN URSR)

SUBMITTED: 17Jun63 ATD PRESS: 3049 ENCL: 00

SUB CODE: MM, IL NO REF SOV: 000 OTHER: 002

Card: 2/2

RUDAKOVA, N.Ya., kand. tekhn. nauk; SHEREMETA, B.K., kand. tekhn. nauk; KOLOSYUK, R.T.; MEL'NIK, A.A.; CHURAKOV, P.I.; KRIMERMAN, S.Z.; BILONIZHKO, A.D.

Obtaining commercial paraffins and fuel oils by the destructive distillation of a heavy paraffin lubricant derived from western Ukraine oils. Neft. i gaz. prom. no.2:53-56 Ap-Je '63.

(MIRA 17:11)

1. Gosudarstvennyy nauchno-issledovatel'skiy i proyektnyy institut ugol'noy, rudnoy, neftyanoy i gazovoy promyshlennosti UkrSSR (for Kolosyuk). 2. Pervyy drogobychskiy neftepererabatyvayushchiy zavod (for Mel'nik, Churakov, Krimerman, Bilonizhko).

CHURAKOV, P.I.

Semi-industrial integrated line for shaping structural petroleum asphalt into blocks. Nefteper. i neftekhim. no.8:28-30 '63. (MIRA 17:8)

1. Pervyy Drogobychskiy neftepererabatyvayushchiy zavod.

CHURAKOV, V.K., inzh.

The automatic control of feeders. Gor. zhur. no.4:69-70 Ap '65.
(MIRA 18:5)

1. Nauchno-issledovatel'skaya laboratoriya radioaktivnykh izotopov, g. Frunze.

L 53907-65 EWT(m)/EPR/EWP(w) EM
ACCESSION NR: AP5012084 UR/0147/65/000/002/0040/0047

AUTHOR: Churakov, V. N.

TITLE: The problem of similarity in the case of elastic and plastic phenomena in solid bodies

SOURCE: IVUZ. Aviatsionnaya tekhnika, no. 2, 1965, 40-47

TOPIC TAGS: classical elasticity theory, stress strain analysis, similarity theory, physical process simulation, mathematical model, plasticity theory

ABSTRACT: The author considers a situation in which, in two geometrically similar [illegible] form some physical process is taking place for example, stress and [illegible] are being created. A system of differential equations and boundary [illegible] which mathematically describes these fields. This system contains [illegible] of uniqueness: the geometry of the bodies, the physical characteristics of [illegible]. It is required that the stress and strain fields in [illegible] be similar, that all corresponding quantities (unknown and given) must be in constant [illegible] equal to the similarity scales. On the basis of this general problem, the author derives similarity criteria for processes in nature and in simulated models, and for various states caused by transformation of the similarity scale. Basic equations are

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L 53907-65
ACCESSION NR: AP5012084

derived for similarity of specific parameters and functions (stress as a function of temperature, etc.). The similarity law obtained is derived on the condition that identical material be employed in the natural state and in the model. Alternative formulas are provided for cases in which the materials are not identical. Consequently, the similarity law given in the article makes it possible to simulate external pressure during testing. In addition, even when identical material is used in the natural state and in the model, the modulus is a function of temperature. The practical consequences of this circumstance are illustrated in the text. The author also demonstrates that the modulus may depend as well on the rate of loading. Further considered in the article are small elastic-plastic deformations with simple loading, when all external force factors change according to the same law. Temperature is also an external factor; however, as the author points out, the question of how it should change in order that the loading be simple has as yet been little studied. Postulates of the theory of plasticity are analyzed and a fundamental condition of invariantness of equations with respect to similarity transformations is found in the form of Poisson's law. Orig. art. has: 46 formulas and 1 figure.

ASSOCIATION: None.

SUBMITTED: 09Dec64 ENCL: 00 SUB CODE: ME

NO REF SOV: 019 OTHER: 001

Card 2/2

L 34257-66 EWT(l)/EWT(m)/EWP(w)/EWP(i)/T IJP(c) EM/JD/RM
ACC NR: AP6024707 SOURCE CODE: UR/0374/66/000/001/0147/0150

AUTHOR: Churakov, V. N.

ORG: Moscow "Order of Lenin" Aviation Institute im. S. Ordzhonikidze (Moskovskiy ordena Lenina aviatsionnyy institut)

TITLE: Use of EPP-09 automatic recorders for registration of deformations in parts made from epoxy resin

SOURCE: Mekhanika polimerov, no. 1, 1966, 147-150

TOPIC TAGS: epoxy plastic, electronic circuit, resistor, strain gage, resin, material deformation, recording equipment/EPP-09 recording equipment

ABSTRACT: The author describes a 24-channel automatic recorder of the EPP-09 type with a specially designed bridge attachment for recording deformation measured by strain gauges inside components made of epoxy resins. A schematic diagram of the measurement bridge is given, and the balancing operation is described. The bridge circuit permits the use of sensing elements in the strain guage with a nominal initial resistance of 100-300 Ω with good linearity and a total relative error in registration of deformations of less than ±2.5%, with limits in measurement of deformations of ±2.0%. The use of the bridge attachment eliminates the need for alterations in the basic instrument so that it may be easily converted for making temperature measurements. Temperature compensation problems will be considered in a separate article. Orig. art. has: 5 figures. [JPRS: 35,995]

SUB CODE: 14, 20, 09, 11 / SUBM DATE: 15Jun65 / ORIG REF: 012

Card 1/1

UDC: 678.01.624.058.2

ALEKSEYEV, A.F.; BORISENKO, A.P.; GLIKSON, V.I.; GROMOVA, N.F.; KRASOVSKAYA, A.I.; NOVIKOVA, M.N.; OVCHAROVA, A.I.; KHVOYNIK, P.I.; CHURAKOV, V.P.; SHASTITKO, V.M.; GEORGIYEV, Ye.S., red.; SHIL'DKRUT, V.A., red.; LEVCHUK, K.V., red.; LEKANOVA, I.S., tekhn.red.

[Prices on the world capitalistic market; a handbook] TSeny mirovogo kapitalisticheskogo rynka; spravochnik. Moskva, Vneshtorgizdat, 1958. 391 p. (MIRA 12:7)

1. Moscow. Nauchno-issledovatel'skiy kon"yunkturnyy institut. (Prices)

CHURAKOV, V.P.

KAPELINSKIY, Yu.N.; POLYANIN, D.V.; MENZHINSKIY, Ye.A.; IVANOV, I.D.; SERGEYEV, Yu.A.; KOSTYUKHIN, D.I.; DUDUKIN, A.N.; IVANOV, A.S.; FINOGENOV, V.P.; ZAKHMATOV, M.I.; SOLODKIN, R.G.; DUSHEN'KIN, V.N.; BOGDANOV, O.S.; SEROVA, L.V.; GONCHAROV, A.N.; KARKHIN, G.I.; LYUBSKIY, M.S.; PUCHIK, Ye.P.; SEROVA, L.V.; KAMENSKIY, N.N.; SABEL'NIKOV, L.V.; FEDOROV, B.A.; GERCHIKOVA, I.N.; KARAVAYEV, A.P.; KARPOV, L.N.; SHIPOV, Yu.P.; VLADIMIRSKIY, L.A.; KUTSENKOV, A.A.; RYABININA, E.D.; ANAN'YEV, P.G.; ROGOV, V.V.; BELOSHAPKIN, D.K.; SEYFUL'MULYUKOV, A.M.; PARFENOV, A.Ya.; SMIRNOV, V.P.; ALEKSEYEV, A.F.; SHIL'DKRUT, V.A.; CHURAKOV, V.P.; BORISENKO, A.P.; ISUPOV, V.T.; ORLOVA, N.V., red.; GORYUNOVA, V.P., red.; BELOSHAPKIN, D.K., red.; GEORGIYEV, Ye.S., red.; KOSAREV, Ye.A., red.; KOSTYUKHIN, D.I., red.; MAYOROV, B.V., red.; PANKIN, M.S., red.; PICHUGIN, B.M., red.; POLYANIN, D.V., red.; SOLODKIN, R.G., red.; UFIMOV, I.S., red.; EKHIN, P., red.; SMIRNOV, G., tekhn.red.

[Economy of capitalist countries in 1957] Ekonomika kapitalisticheskikh stran v 1957 godu. Pod red. N.V.Orlova, IU.N.Kapelinskogo i V.P.Goriunova. Moskva, Izd-vo sotsial'no-ekon.lit-ry, 1958. 686 p. (MIRA 12:2)

1. Moscow. Nauchno-issledovatel'skiy kon"yunkturnyy institut. (Economic conditions)

KAPELINSKIY, Yu.N.; POLYANIN, D.V.; ZOTOV, G.M.; IVANOV, I.D.; SERGEYEV, Yu.A.; MENZHINSKIY, Ye.A.; KOSTYUKHIN, D.I.; DUDUKIN, A.N.; IVANOV, A.S.; FINOGENOV, V.P.; ZAKHMATOV, M.I.; SOLODKIN, R.G.; DUSHEN'KIN, V.N.; BOGDANOV, O.S.; SEROVA, L.V.; GONCHAROV, A.N.; LYUBSKIY, M.S.; PUCHIK, Ye.P. [deceased]; KAMENSKIY, N.N.; SABEL'NIKOV, L.V.; GERCHIKOVA, I.N.; FEDOROV, B.A.; KARAVAYEV, A.P.; KARPOV, L.N.; VARTUMYAN, E.L.; SHIPOV, Yu.P.; ROGOV, V.V.; BOGDANOV, I.I.; VLADIMIRSKIY, L.A.; LEBEDEV, B.I.; ANAN'YEV, P.G.; TRINICH, F.A.; GOLOVIN, Yu.M.; MATYUKHIN, I.S.; SEYFUL'MULYUKOV, A.M.; SHIL'DKRUT, V.A.; ALEKSEYEV, A.F.; BORISENKO, A.P.; CHURAKOV, V.P.; SHASTITKO, V.M.; GERUS, V.G.; ORLOV, N.V., red.; KAPELINSKIY, Yu.N., red.; GORYUNOV, V.P., red. V redaktirovanii prinimali uchastiye: BELOSHAPKIN, D.K., red.; GEORGIYEV, Ye.S., red.; KOSAREV, Ye.A., red.; PANKIN, M.S., red.; PICHUGIN, B.M., red.; SHKARENKOV, Yu.S., red.; MAKAROV, V., red.; BORISOVA, K., red.; CHEPELEVA, O., tekhn.red.

[The economy of capitalistic countries in 1958] Ekonomika kapitalisticheskikh stran v 1958 godu. Pod red. N.V.Orlova, IU.N.Kapelinskogo, V.P.Goriunova. Moskva, Izd-vo sotsial'no-ekon.lit-ry, 1959. 609 p. (MIRA 12:12)

1. Moscow. Nauchno-issledovatel'skiy kon"yunkturnyy institut. (Economic conditions)

Chukakov, V.V.

3.5000

80803

SOV/124-59-9-10352

Translation from: Referativnyy zhurnal, Mekhanika, 1959, Nr 9, p 113 (USSR)

AUTHORS: Vlasenko, G.Ya., Deryagin, B.V., Kudryavtseva, N.M., Prokhorov, P.S., Storozhilova, A.I., Churakov, V.V.

TITLE: Flow Methods for Investigating Atmospheric Aerosols

PERIODICAL: V sb.: Issled. oblakov, osadkov i grozovogo elektrichestva, Leningrad, Gidrometeoizdat, 1957, pp 185 - 188

ABSTRACT: Not only the number of particles within the volume unit, but also their dimension distribution can be determined by the ultramicroscopic flow investigation method. For this purpose, an optical discriminator (photometric wedge), making it possible to obtain the particle-brightness distribution, was mounted into the target illuminating device of an ultramicroscope. A new wedge-graduation method is described; the graduation curves of the dependence of particle dimensions on the wedge position can be obtained quickly, when applying the method mentioned. The authors report on the flow method applied to the study of the atmospheric condensation nuclei. For this purpose, a simple

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SOV/124-59-9-10352

Flow Methods for Investigating Atmospheric Aerosols

accessory device is developed for "revealing" the condensation nuclei containing in the atmosphere. This accessory device consists of an air-moistening chamber and a cooling channel, in which vapor condensation on the condensation nuclei proceeds. The condensation nuclei, enlarged in this way, are carried away by the air current, arrive at the cell of the ultramicroscope, and can be recorded by the observer. The optimum operation conditions of the device were determined experimentally. By the ultramicroscopic flow method, the automation of registering aerosol particles or "revealed" condensation nuclei can be brought about. The design of an automatic counter developed for this purpose is presented. This counter carries out the registration of aerosol particles of high numerical concentrations without failing.

S.V. Severin

Card 2/2

S/069/61/023/002/007/008
B101/B208

AUTHORS: Deryagin, B. V., Churakov, V. V., and Vlasenko, G. Ya.

TITLE: Flow ultramicroscope with automatic count of aerosol particles

PERIODICAL: Kolloidnyy zhurnal, v. 23, no. 2, 1961, 234-237

TEXT: The dust content of air is measured with a flow microscope by visual observation of the dust particles flashing up in the light. The visual observation is, however, tiresome. The present paper therefore describes an automatic counting device. Fig. 2 presents the scheme of this apparatus which uses a ВДК (VDK) ultramicroscope. The aerosol is sucked into cuvette (1), and passes through the illuminated zone (2). The light scattered by the aerosol particles is focused by objective (3) to the cathode (4) of an ФЭУ-19 (FEU-19) photomultiplier which is at a distance of 500 mm. In front of the photomultiplier there is a rotary diaphragm (5) with apertures of 0.5, 1.5, 7.5, and 30 mm diameter for adapting the light intensity to the aerosol concentration. If the apparatus is remote-controlled, (5) may be mounted on a БД-404А (BD-404A) selsyn motor (6) which is

Flow ultramicroscope ...

driven by selsyn-motor (7). A 75-w and 10-v lamp of the type K-21 ($Л_1$ in Fig. 2) was used as light source. The optical discriminator (8) with 5 apertures containing neutral gray glass filters of different densities was used for subdivision of the particle size. (8) is fastened on the axis of a СЧЗ (SChZ) telephone relay (9). The latter operates when the contact is closed on disk (10). Simultaneously, the two-way cock (11) on the axis of (10) is opened or closed. (10) and (11) are driven by electric motor (14) (15-20 w). The other end of the motor shaft drives air pump (15) which produces a partial vacuum of 20-30 mm Hg. When (11) is open, the aerosol is sucked in. When (11) is closed, (15) is connected with (1) via capillary (12) and U tube (13), the change of the liquid level in (13) being equal to the aerosol volume sucked through (1). The voltage of the photomultiplier is increased by pulse amplifier (16) and conveyed to mechanical counter (17). In order to be independent of voltage fluctuations in power supply, the photomultiplier is fed by ГБ-300 (GB-300) batteries. The aerosol concentration is calculated from the following equation: $N = na/V$ (N = number of particles in 1 cm^3, n = number of particles obtained by the counter, V = volume (cm^3) of aerosol sucked through the cuvette, a = constant for the corresponding aperture of the rotary diaphragm). This device allows to

measure aerosol concentrations between $10-10^7$ particles per cm^3 without dilution. It records particles of a diameter from 10^{-5} to $20 \cdot 10^{-4}$ cm approximately. Determination of aerosol concentration and division into five fractions according to particle size takes 7-12 min. A. Ye. Mikirov and A. G. Laktionov are mentioned. There are 3 figures, 1 table, and 6 references: 5 Soviet-bloc and 1 non-Soviet-bloc. The reference to English-language publication reads as follows: F. T. Gucker, C. T. O'Konski, J. Amer. Chem. Soc., 69, 2422, 1947.

ASSOCIATION: Institut fizicheskoy khimii AN SSSR, Laboratoriya poverkhnostnykh yavleniy (Institute of Physical Chemistry of the AS USSR, Laboratory of Surface Phenomena)

SUBMITTED: April 28, 1960

Card 3/4

Flow ultramicroscope ...

Legend to Fig. 2: a) reductor; b) the relay of the optical discriminator; c) remote-control unit

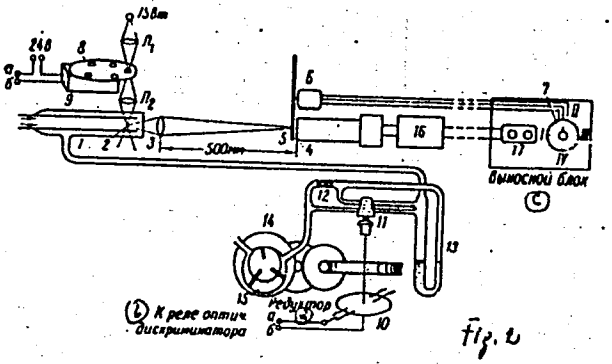


Fig. 2

Card 4/4

L 08856-67 EWT(d)

ACC NR: AP6010781 SOURCE CODE: UR/0146/66/009/001/0131/0136

AUTHOR: Churakov, Ye. P.

ORG: Moscow Power-Engineering Institute (Moskovskiy energeticheskiy institut)

TITLE: Optimization of velocity-inertial navigation systems

SOURCE: IVUZ. Priborostroyeniye, v. 9, no. 1, 1966, 131-136

TOPIC TAGS: ship navigation, inertial navigation equipment

ABSTRACT: Optimization of the elements which connect the original inertial navigation system with an additional velocity-measuring instrument is theoretically considered. A "generalized scheme" of such a combined system (F. V. Johnson, Proc. Nat. El. Conf., 1959, v. 15) presupposes the planar motion of the craft with respect to a stationary sphere. Following A. Dushmen's work, the gyro drift rate is assumed to be a random process. An operator G(s) is

Card 1/2

L 08856-67

ACC NR: AP6010781 O

found which minimizes the mean square error in the velocity information and makes the system-transient time acceptably small. In a typical numerical example, the optimizing filters have a rather simple design, and the system mean square error is lower by 10% than that of the velocity-measuring instrument. Error dispersions in the pure inertial and combined systems are compared. Orig. art has: 3 figures and 13 formulas.

SUB CODE: 17 / SUBM DATE: 26Jan65 / ORIG REF: 004 / OTH REF: 005

Card 2/2

BARABANOV, K.; LEVANOV, N.; LEMESHEV, M.; LEONTOVSKIY, V.; PROKHOROV, A.; CHURAKOV, Yu.; KOSTIN, M., red.

[The party leads us to communism] Partiia nas k kommunizmu vedet. Moskva, Gospolitizdat, 1959. 34 l. (MIRA 13:4)
(Russia--Economic policy--Audio-visual aids)

CHURAKOV, Yu.

In a united front toward the cherished goal. Vnesh. torg. 41 no.1:9-11 '61. (MIRA 14:1)

(Russia—Foreign economic relations—China)
(China—Foreign economic relations—Russia)

COUNTRY : USSR
CATEGORY : GENERAL&SPEC.ZOOLOGY.INSECTS
Insect and Mite Pests.
ABS. JOUR.: Ref Zhur -Biologiya, No. 4, 1959, No. 1[illegible]

Author : Churakova, A.M.; Pigarova, Ye.N.
INST. : --
TITLE : Aerosol Treatment of Plantations in Gardens.

ORIG. PUB.: Zashchita rast. ot vredit. i bolezney, 1953, No.2, 57

ABSTRACT : On the 7th and 13th of May, 1957 (Tambovskaya Oblast) at the height of the blossoming period 0 hectare of cherry trees were treated with an aerosol of diesel oil and 5% DDT, and 4 hectare of apples was treated with an aerosol composed of a mixture of 5% DDT, 10% chlorthane and 40% distilled extract of phenol-purified oil in diesel oil with 20 - 25 liter dispense per hectare. The aerosols did not show any harmful influence on the flowers and leaves,

CARD : 1/3

COUNTRY :
CATEGORY : GENERAL-SPEC.ZOOLOGY.INSECTS

ABS. JOUR. : Ref Zhur -Biologiya, No.4 , 1959, No. 16294

AUTHOR :
INST. :
TITLE :

ORIG. PUB.:

ABSTRACT :

CARD: 1/3

CATEGORY :
SUBJECT : GENERAL &SPEC.ZOOLOGY.INSECTS

ABS. JOUR.: Ref Zhur -Biologiya, No. A., 1959, No. [illegible]

Author :
INST. :
TITLE :

ORIG. PUB.:

ABSTRACT : [illegible] M.P. Adrianov

CARD : 3 / 3

VELIKORETSKIY, D.A.; LORIYE, K.M.; FINKEL', I.I.; GRIGORCHUK, Yu.F.; BERGER, L.Kh.; UTROBINA, V.V.; KHARCHENKO, V.P.; MESHCHERYKOV, A.V., student V kursa; OBEREMCHENKO, Ya.V., kand.med.nauk; NIKITIN, A.V.; MUKHOYEDOVA, S.I.; KUSMARTSEVA, L.V., assistent; KUZNETSOV, V.A., dotsent; KUKHTINOVA, R.A., assistent; BONDARENKO, Ya.D. (g. Fastov); KURTASOVA, L.V. (g. Fastov); PEVCHIKH, V.V.; CHURAKOVA, A.Ye.; BABICH, M.M.; KUZ'MIN, K.P.; PAVLOV, S.S.; SHEVLYAKOV, L.V., kand. med.nauk; IGNAT'YEVA, O.M.; ZEYGERMAKHER, G.A.; GUTKIN, A.A.; POLYKOVSKIY, T.S.

Resumes. Sov.med. 25 no.11:147-152 N '61. (MIRA 15:5)

1. Iz Instituta grudnoy khirurgii AMN SSSR (for Velikoretskiy, Loriye, Finkel'). 2. Iz bol'nitsy No.3 Gorlovki Stalinskoy oblasti (for Grigorchuk). 3. Iz Tyumenskoy oblastnoy bol'nitsy (for Berger, Utrobina). 4. Iz Karatasskoy rayonnoy bol'nitsy Yuzhno-Kazakhstanskoy oblasti (for Kharchenko). 5. Iz Gospital'noy khirurgicheskoy kliniki I Moskovskogo ordena Lenina meditsinskogo instituta imeni Sechenova (for Meshcheryakov). 6. Iz kliniki propedevticheskoy terapii Stalinskogo meditsinskogo instituta na baze oblastnoy klinicheskoy bol'nitsy imeni Kalinina (for Oberemchenko). 7. Iz kliniki gospital'noy terapii Voronezhskogo meditsinskogo instituta (for Nikitin, Mukhoyedova). 8. Iz kafedry obshchey khirurgii Kishinevskogo meditsinskogo instituta (for Kusmartseva).

(Continued on next card)

VELIKORETSKIY, D.A.---(continued) Card 2.

9. Iz akushersko-ginekologicheskoy kliniki Stalinskogo meditsinskogo instituta na baze bol'nitsy imeni Kalinina (for Kuznetsov, Kukhtinova). 10. Iz gospital'noy terapevticheskoy kliniki Izhevskogo meditsinskogo instituta (for Pevchikh, Churakova). 11. Iz Nosovskoy rayonnoy bol'nitsy Chernigovskoy oblasti (for Babich). 12. Iz Vyborgskoy mezhrayonnoy bol'nitsy (for Pavlov). 13. Iz 1-y gorodskoy bol'nitsy Tyumeni (for Ignat'yeva). 14. Iz 2-y infektsionnoy bol'nitsy g. Zaporozh'ya (for Zeygermakher). 15. Iz infektsionnogo i prozektorskogo otdeleniy Petrozavodskoy gorodskoy bol'nitsy (for Gutkin, Polykovskiy).

(MEDICINE--ABSTRACTS)

CHURAKOVA, M.V.

MAKAROVA, L.A.; NOGALLER, A.M.; CHURAKOVA, M.V. (Yessentuki)

Effect of Nagutskoye mineral water on some functions of the digestive apparatus. Klin.med. 35[i.e.34] no.1 Supplement:19 Ja '57.
(MIRA 11:2)

1. Iz Essentukskogo klinicheskogo otdeleniya (nauchnyy rukovoditel' - prof. A.S.Vishnevskiy) Bal'neologicheskogo instituta na Kavkazskikh Minieral'nykh Vodakh (dir. - dotsent I.S.Savoshchenko.
(DIGESTION)
(STAVROPOL TERRITORY--MINERAL WATERS)

MAL'TSEV, V.; BORODIN, V.; SINYAVSKIY, V.; CHURAKOVA, N.

Siberia and the Far East must have their own good health resorts!
Okhr.truda i sots.strakh. no.5:49-53 My '59.(MIRA 12:9)

1. Predsedatel' Chabarovskogo kraevogo soveta profsoyuzov (for Mal'tsev). 2. Predsedatel' Sakhalinskogo oblastnogo soveta profsoyuzov (for Borodin). 3. Predsedatel' Chitinskogo oblastnogo soveta profsoyuzov (for Sinyavskiy).
(Soviet Far East--Health resorts, watering places, etc.)
(Siberia--Health resorts, watering places, etc.)

ABRAMOVICH, L.A.; ZAYDENOV, A.M.; Prinimala uchastiye: CHURAKOVA, N.D., laborant

Clinical aspects and diagnosis of amebiasis. Med.paraz.i paraz.bol. 33 no.4:430-433 Jl-Ag '64. (MIRA 18:3)

CHURAKOVA, R. S., Cand of Tech Sci -- (diss) "A study of the combining properties of wet-ground magnesite." Leningrad, 1957, 15 pp (Leningrad Technological Institute im Lensovet, Chair of the Technology ofFireproof Materials) 100 copies (KL, 30-57, 111)

ACC NR: AP7005312 (A) SOURCE CODE: UR/0131/67/000/001/0047/0049

AUTHOR: Voronin, N. I.; Churakova, R. S.

ORG: All-Union Institute of Refractories (Vsesoyuznyy institut ogneuporov)

TITLE: Quartz products fabricated by the slip casting method

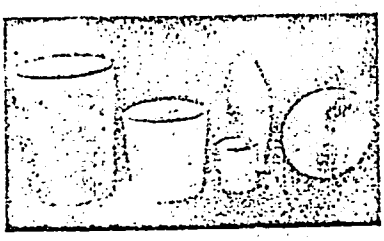
SOURCE: Ogneupory, no. 1, 1967, 47-49

TOPIC TAGS: slip casting, refractory product, quartz, dielectric material, sintering

ABSTRACT: Utilizing the recently developed simple and labor-saving technique of slip casting of opaque quartz glass (Walton, J. D. Ceramic Age, 1960, no. 2, pp 23-25, and others), the authors employed opaque fused quartz that had been pulverized in ball mills for 192 hr until it contained approximately 40% of fractions smaller than 1 μ, and flushed in diluted HCl to remove iron. Thus contamination of the material by iron was precluded while at the same time the silicagel formed during wet grinding was retained, this being highly important to the further processing of the material since it endows with plasticity the pulverized product. SiO_2 content of the powder: 99.3%. 10% sulfite-alcohol mash was added as the peptizing agent. Immediately after its pulverization the fused-quartz slip is poured into

Card 1/3 UDC: 666.192

plaster molds. Increasing the fineness of grinding of the fused quartz enhances the sinterability and strength of the fired products and reduces their porosity. The optimal firing temperature at which products with a high thermal resistance can be obtained is the relatively low temperature of 1200°C, and the optimal firing time, 2 hr. Specimens fired under these conditions contain only traces of cristobalite. The slip casting method was used to fabricate various shapes of quartz containers with walls 1 to 20 mm thick and with capacity of up to 10 liters (see figure). To improve their physicomechanical properties these products, following their firing at 1200°C, were impregnated with organosilicone resin by immersion for 24 hr



Quartz products fabricated by the slip-casting method

in the resin diluted 50% with toluene. The impregnated products were dried at 110°C and refired at 1100°C, at which temperature the resin decomposes and releases active SiO_2 which

ACC NR: AP7005312

fills the pores of the product. Such an impregnation nearly doubles the strength of the products. Quartz crucibles fabricated by this method were satisfactorily used in the founding of lead glass at 1440°C for 1 hr (with prior heating of the crucibles to 1300°C for 3-4 hr). Fused-quartz products fabricated by the slip-casting method display a low thermal conductivity and high dielectric characteristics. Orig. art. has: 2 figures, 4 tables.

SUB CODE: 11, 20, 13/ SUBM DATE: none/ OTH REF: 007

Card 3/3

KLYUCHAROV, Ya.V.; CHURAKOVA, R.S.

Periclase cement and its properties. Trudy LTI no.57:65-72 '59.
(MIRA 13:8)

(Cement) (Periclase)

CHURAKOVA, S.A.

Thyrotropic function of the hypophysis in patients with rheumatic fever. Probl. endok. i gorm. 11 no.5:21-25 S-O '65.
(MIRA 19:1)

1. Kafedra gospital'noy terapii (zav. - prof. V.A. Triger) Chernovitskogo meditsinskogo instituta i gistofiziologicheskiy otdel (zav. - prof. O.P. Lisogor) Ukrainskogo instituta eksperimental'noy endokrinologii (direktor - kand. med. nauk S.V. Maksimov, nauchnyy konsul'tant - prof. B.V. Aleshin) Chernovtsy. Submitted July 6, 1964.

S/114/62/000/008/005/006
E194/E455

AUTHORS: Churakova, S.V., Engineer, Yurkina, M.P., Engineer

TITLE: The magnitude of the hydraulic resistance coefficient of lenticular expansion compensators

PERIODICAL: Energomashinostroyeniye, no.8, 1962, 29-30

TEXT: Expansion compensators of various types are fitted in pipe runs. The lenticular type, resembling a segment of aneroid bellows, is a common type. These compensators set up a local aerodynamic resistance because, where the effective diameter of the pipe increases, part of the flow expands into the compensator, flows around and later returns to the main stream, causing a compressive effect. Factors as high as 1.3 to 3.4 have been quoted for the resistance of lenticular compensators, and sleeves are sometimes fitted to reduce these losses. Tests made at the Ural'skiy turbomotornyy zavod (Ural Turbine Works) showed that such figures are exaggerated. For pipes of 200 mm internal diameter and more, the resistance factor does not exceed 0.2 with the Reynolds number in the range of 1.2×10^5 to 5.8×10^5. Simple calculations endorse this result. The use of sleeves did not appreciably reduce the losses and is, therefore, not recommended.
Card 1/1 There are 3 figures.

Churakova, T.P.

KARACHEVTSEVA, V.N.; ZUBTSOVA, G.S.; CHURAKOVA, T.P.; USH[illegible]

Basic tasks of medical service for seasonal day nurseries. Vop.okh.mat. i det. 2 no.4:76-79 Jl-Ag '57.
(MLR- [illegible])

1. Iz Gosudarstvennogo nauchno-issledovatel'skogo pediatricheskogo instituta, Moskva.
(DAY NURSERIES)

CHURAKOVA, T.P.

Significance of various skin reactions in the dynamics of attacks or rheumatism in children. Pediatriia 23 no. 5:75-81 My '60. (MIRA 14:1)

(RHEUMATIC FEVER)

SHMULEVICH, S.L.; TSELUYKO, G.N.; SOLOV'YEVA, M.G.; CHURAKOVA, V.A.

Nurses' councils. Med.sestra 21 no.8:61-62 Ag '62.
(MIRA 15:9)

1. Predsedatel' Soveta meditsinskikh sester Semipalatinskogo oblastnogo venerologicheskogo dispansera (for Solov'yeva).
2. Predsedatel' Soveta meditsinskikh sester detskoy bol'nitsy Yoshkar-Ola, Mariyskoy ASSR (for Churakova).
(NURSES AND NURSING)

KARLINSKIY, V.M., kand.med.nauk; CHEREPANOVA, A.G.; CHURAKOVA, V.A.

Unusual complications of anthracosis. Terap. arkh. 34 no.12:105-109 D'62. (MIRA 16:6)

1. Iz gospital'noy terapevticheskoy kliniki (zav. - dotsent K.Z.Tnimova) Karagandinskogo meditsinskogo instituta i patologoanatomicheskogo otdeleniya (zav. V.A.Churakova) Gorodskoy klinicheskoy bol'nitsy No.1 (glavnyy vrach I.I.Liberman).
(LUNGS—DUST DISEASES)

TNIMOVA, K.Z.; CHURAKOVA, V.A.

Case of periarteritis nodosa with thrombophlebitis migrans of the lower extremities. Zdrav. Kazakh. 22 no.9:74-77 '62. (MIRA 17:2)

1. Iz kafedry gospital'noy terapii (zav. - prof. Ye.I. TSukershteyn) Karagandinskogo meditsinskogo instituta.

CHURANOV, M.S., podpolkovnik, voyennyy letchik pervogo klassa

The engineer assists. Vest. Vozd. Fl. no.11:39-44 N '60.
(MIRA 13:11)

(Airplanes--Maintenance and repair)

CHURANOV, S., prepodavatel'; KHODAKOV, Yu., prof.; CHERTKOV, I., prepodavatel' khimii

Problems and experiments in chemistry. Nauka i zhizn' 30 no.4: 98 Ap '63. (MIRA 16:7)

1. Moskovskiy gosudarstvennyy universitet (for Churanov). 2. Kafedra khimii Moskovskogo aviatsionnogo ordena Lenina instituta im. Sergo Ordzhonikidze (for Khodakov). 3. Nauchno-issledovatel'skiy institut obshchego i politekhnicheskogo obrazovaniya Akademii pedagogicheskikh nauk RSFSR (for Chertkov).
(Chemistry—Problems, exercises, etc.)

CHURANOV, S., prepodavatal'

Problems of the second round of the Moscow Chemistry Olympiad. Nauka i zhizn' 30 no.5:81, 110-111 My '63. (MIRA 16:10)

1. Moskovskiy gosudarstvennyy universitet.

Churanov, S.S.

20-2-28/60

AUTHORS: Nesmeyanov, A. N. , Member of the Academy,
Perevalova, E. G. , Churanov, S. S.

TITLE: Ferrocene Sulphoacids (Ferrotsensul'fokisloty)

PERIODICAL: Doklady Akademii Nauk SSSR, 1957, Vol. 114, Nr 2, pp. 335-338 (USSR)

ABSTRACT: The authors produced these compounds by using the method devised by A. P. Terent'yev and consisting of action by pyridinsulphotrioxide on ferrocene. V. Weinmayr obtained them at the same time only as ammonium salts at interaction of ferrocene and sulphuric acid in acetic anhydride. The paper under review describes the ferrocene sulphonation by pyridinsulphotrioxide in dichlorethane and by dioxansulphotrioxide, further the insulation of the free mono- and di-ferrocenesulphonic acid, of some of its salts, of the methylethers and of chloranhydride of the ferrocenesulphonic acid. In the above-mentioned reaction, which is brought about by heating through four hours, the mono-acid (84 % of the ferrocene entering the reaction) is produced. 22 % of ferrocene remain unchanged. By longer heating, 41 % of the dio-acid with small

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Ferrocene Sulphoacids

amounts of the mono-acid are brought about. Only 7 % of ferrocene remained unchanged. The sulphonic acids are insulated as barium salts and lead salts. The free mono-acid is produced from the lead salt by treatment with hydrogen sulphide, as well as at ferrocene sulphonation with dioxansulphotrioxide at normal room temperature. Yield 62 %; 54 % ferrocene unchanged. Free di-sulphonic acid was produced at sulphonation with dioxan-sulphotrioxide in dichlorethane. Here it is eliminated as a complex with dioxane. Yield 85 %. Also in ferrocene sulphonation with sulphuric acid in acetic hydride free disulphonic acid was insulated, crystallizing with four molecules of water. Yield amounting to 51 % of the theoretical yield. The potentiometric titration produced a curve typical for a monobasic acid. This signifies a close relationship between the first and the second constant, and consequently a lower mutual influence of the two sulphonic groups. This suggests a position of the sulphonic groups in different nuclei of the ferrocene molecule. For both acids, S-benzylthiuronium salts and salts with several amines were obtained. Under influence of diazomethane, methylethers of the above acids were produced which are soluble in organic

Ferrocene Sulphoacids

solvents. Chlorine anhydride of the mono-acid is easily produced with good yield at shorter heating of the mono-acid or of its lead salt, with abundance of PCl_3. Unlike aromatic sulphonic acids, the acids under consideration are less hygroscopic and they are more easily insulated in their free state. The experimental part of the paper under review contains a description of the production methods together with constants and yields. There are 3 references, 2 of which are Soviet.

SUBMITTED: January 12, 1957

AVAILABLE: Library of Congress

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AUTHORS: Nesmeyanov, A. N., Member, Academy of Sciences, USSR, Perevalova, E. G., Churanov, S. S., Nesmeyanova, O. A. 20-119-5-30/59

TITLE: The Reactions of Ferrocene Sulfonic Acids (Reaktsii ferrotsensul'fokislot)

PERIODICAL: Doklady Akademii Nauk SSSR, 1958, Vol. 119, Nr 5, pp. 949-952 (USSR)

ABSTRACT: After having described ferrocene by various sulfonating reagents and some derivatives of ferrocene sulfonic acids in an earlier paper (reference 1) the authors in the present paper deal with a number of further sulfurous substituted ferrocenes which they obtained. Further an attempt was made to realize the exchange reaction of the sulfo group. By interaction of the lead salt of ferrocene disulfonic acid $Fe(C_5H_4SO_3)_2Pb.4H_2O$ with phosphorus trichloride they obtained monochlor anhydride $ClSC_2C_5H_4FeC_5H_4SO_3H$. Phosphorus oxychloride with the lead salt of the di-acid forms the acid dichloride of ferrocene disulfonic acid. The lead salt of monosulfonic acid is

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group by a hydroxyl (by melting together with alkali), by cyanogen (by means of the influence of potassium ferricyanide) or by a formyl group (by means of heating with sodium formiate); all these attempts led to a complete destruction of the ferrocene nucleus, where either ferric hydroxide or iron salt were liberated. The hydrolysis of sulfonic acids under formation of ferrocene also failed. The stability of the linkages of iron with the cyclopentadienyl rings is apparently highly reduced under the influence of the sulfo groups, as compared with ferrocene. The introduction of a sulfo group reduces the susceptibility to further substitutions, to a high degree in the same cyclopentadienyl ring and to a much lower degree in the other ring (ref 1). The influence exerted by the sulfo group upon the reactivity of the ferrocene nucleus is similar to that of the acetyl group (reference 5). An experimental part with the usual data follows. There are 5 references, 4 of which are Soviet.

ACC NR: AP6036021 SOURCE CODE: UR/0376/66/002/010/1289/1299

AUTHORS: Gabasov, R.; Churakova, S. V.

ORG: Ural Polytechnic Institute im. S. M. Kirov (Ural'skiy politekhnicheskiy institut)

TITLE: One optimal-control problem in systems with an aftereffect

SOURCE: Differentsial'nyye uravneniya, v. 2, no. 10, 1966, 1289-1299

TOPIC TAGS: optimal control, mathematic space, vector, vector function, differential equation, matrix function, functional equation, algebraic equation

ABSTRACT: One optimal-control problem with retention of the trajectory at the coordinate origin for a finite time interval for a system with an aftereffect is examined. This work is based on an article by L. S. Pontryagin, V. G. Boltyanskiy, R. V. Gamkrelidze, Ye. F. Mishchenko (Matematicheskaya teoriya optimal'nykh protsessov. M., Fizmatgiz, 1961). The motion of the object in question is described by a differential equation with a divergent independent variable:

$$\dot{x}(t) = A(t)x(t) + B(t)x(t-h) + C(t)u(t),$$

where x is an n-dimensional vector defined in the space X; u(t) is an n-dimensional piecewise continuous vector function which belongs to the set of allowable controls U; A(t), B(t), and C(t) are continuous matrix functions. In the class of allowable controls, it is necessary to select a control u(t), $0 \leq t \leq T$ such that the trajectory

 UDC: 517.949

ACC NR: AP6036021

of the above system satisfies the condition

$$x(t) \equiv 0, \quad T-h \leqslant t \leqslant T.$$

It is shown that, for given x^0, $\varphi(t)$, T, and h, in order that this problem have a solution, it is necessary and sufficient that the following inequality be satisfied:

$$\max_{\|g\|=1} \left\{ (g, e(T-h)) + \min_{u \in U_1} \left(g, \int_0^{T-h} F(T-h, \tau) C(\tau) u(\tau) d\tau \right) \right\} \leqslant 0.$$

Here g is any vector of unitary valuation. A control $u^0(t)$ that for given x^0, $\varphi(t)$, and h solves the initial problem in the minimum time is found. The authors thank F. M. Kirillova for discussion. Orig. art. has: 9 formulas.

SUB CODE: 12/ SUBM DATE: 30Nov65/ ORIG REF: 004

Card 2/2

CHURASHEV, N.

Good trailers are needed. Avt.transp. 37 no.3:10-13 Mr '59.
(MIRA 12:4)

1. Glavnyy inzhener Upravleniya avtotransporta Magadanskogo sovnarkhoza.
(Truck trailers)

CHURASHOV, M.P. (stantsiya Glotovka Ufimskoy dorogi).

Machine tool used for manufacturing plate fastenings. Put' i put. khoz. no.6:28 Je '58. (MIRA 11:6)
(Machine tools) (Railroads--Rails--Fastenings)

GRANIK, Grigoriy Il'ich, kand. ekon. nauk; CHURASHOV, N.Ya., red.; YANOVSKIY, V.V., red.; YURCHENKO, L.I., red.; FEDOROVA, V.V., tekhn. red.

[Transportation in Magadan Province; present-day condition and development problems] Transport Magadanskoi oblasti; sovremennoe sostoianie i problemy razvitiia. Magadan, Magadanskoe knizhnoe izd-vo, 1960. 61 p. (MIRA 14:9)
(Magadan Province—Transportation)

SURKOV, Ye.V.; CHURASHOV, V.I.

Rivets. Standartizatsiia 27 no.10:38-3[illegible] O '63.
(MIRA 16:11)

CHURAYAN, A., kand.tekhn.nauk; DZHABUA, Sh., kand.tekhh.nauk

Earthquakeproof buildings with a nonrigid first story. Zhil. stroi. no.1:14-15 '62. (MIRA 16:1)
(Earthquakes and building)

CHURAYAN, A., kand. tekhn. nauk; DZHABUA, Sh., kand. tekhn. nauk; KOCHESHKOV, V., inzh.; MAL'TSEV, P., inzh.

Sealed joints of elements of earthquake-proof large-panel buildings. Zhil. stroi. no.12:20-21 '62. (MIRA 16:1)

(Earthquakes and building)
(Building—Details)

CHURAYAN, A. L. and BUZ-OGLY, A. M.

Churayan, A. I. and Buz-Ogly, A. M. "Strengthening the laying of stone by means of fiber reinforcement using V-shaped nails", Izvestiya Tbilis. nauch.-issled. in-ta sooruzheniy i gidroenergetiki, Vol. 11, 1948, p. 63-86, - Bibliog: p. 82

S O: U-4630, 16 Sept. 53, (Letopis 'Zhurnal 'nykh Statey, No. 23, 1949).

CHURAYAN, A.L.; LORDKIPANIDZE, R.S.; DZHABUA, Sh.A.; ZAVRIYEV, K.S., redaktor; ONELI, A., tekhredaktor.

[Destruction of buildings in the Chatkal earthquake of November 3, 1946] Razrusheniia postroek pri Chatkal'skom zemletriasenii 3-go noiabria 1946 goda. Tbilisi, Izd-vo Akademii nauk Gruzinskoi SSR, 1949. 56 p. (MLRA 7:11)

1. Deystvitel'nyy chlen Akademii nauk Gruzinskoy SSR. (for Zavriyev) (Chatkal Range--Earthquakes) (Earthquakes--Chatkal Range)

CHURAYAN, A.L.; NAPETVARIDZE, Sh.G.; DZHABUA, Sh.A.

Effect of earthquakes on buildings. Trudy Inst. stroi. dela AN Gruz. SSR 3:113-149 '51. (MLRA 9:10)

(Earthquakes and building)